

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q96434

Masaaki HIRANO, et al.

Appln. No.: 10/588,485

Group Art Unit: 1614

Confirmation No.: 8206

Examiner: not yet assigned

Filed: August 4, 2006

For:

PROPANE-1, 3-DIONE DERIVATIVE OR SALT THEREOF

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

Attorney Docket No.: Q96434 INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 10/588,485

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for

foreign language documents, Applicants submit the following explanations:

English language abstracts submitted herewith, constitute a concise explanation for the

foreign language documents on the attached list.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicants do not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 32,197

Mark Boland

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Facsimile: (202) 293-7860

65565

CUSTOMER NUMBER

WASHINGTON DC SUGHRUE/265550

Date: August 24, 2007

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AND STATEMENT BY APPLICANT

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| Application Number | 10/588,485 | | | |
| Confirmation Number | 8206 | | | |
| Filing Date | August 4, 2006 | | | |
| Pirst Named Inventor | Masaaki HIRANO | | | |
| Art Unit | 1614 | | | |
| xaminer Name | not yet assigned | | | |
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹A. Dicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³Kind of Jacument by the apprenriate symbols as indicated by the document under WIPO Standard ST. 16 if possible of Applicant is to indicate help the Emplish language Translation is attached. **ON STEP TO THE CONTROL OF THE C

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^{&#}x27;Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial support of the part of the reign of the Emperor must precede the serial support of the part of the reign of the Emperor must precede the serial support of the part of the reign of the Point of th

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Zh. Organic Khim. (1994), 30(6), 909-14

LA Russian

Explanation: Found by CAS Search. CAS Search Result is set forth below.

L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:373237 HCAPLUS Full-text

DN 123:169551

ED Entered STN: 24 Feb 1995

T1 C-Monobenzoylation and dibenzoylation of 2-methylbenzimidazole by benzoyl chloride

AU Dzvinchuk, I. B.; Lozinskii, M. O.; Vypirailenko, A. V.

CS Inst. Org. Khim., Kiev, Ukraine

SO Zhurnal Organicheskoi Khimii (1994), 30(6), 909-14 CODEN: ZORKAE; ISSN: 0514-7492

PB Nauka

DT Journal

LA Russian

CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))

G1

- AB Reaction of 2-methylbenzimidazole with BzCl in the presence of Et3N gave monobenzoyl (I), dibenzoyl (II and III), tribenzoyl (IV), and tetrabenzoyl derivs. (V). The interconversion of these products and the effect of temperature were examined
- ST benzoylation methylbenzimidazole; benzimidazole methyl benzoylation

IT Benzoylation

(of methylbenzimidazole by benzoyl chloride)

1T 615-15-6, 2-Methylbenzimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(benzoylation of)

1T 98-88-4, Benzoyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(benzoylation of methylbenzimidazole by)

IT 67264-61-3P 167281-71-2P 167281-72-3P 167281-73-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(benzoylation of methylbenzimidazole by benzoyl chloride)

IT 74440-30-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(benzoylation of methylbenzimidazole by benzoyl chloride)

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^{&#}x27;Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Emperor must precede the serial interpretation of the year of the reign of the Year of the year of the reign of the Year of the year of the reign of the year of the reign of the year of y

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| Benzimidazole series. V. Behavior of 2-methylene-1,3-dimethylbenimidazoline. Alkylation and acylation reaction. |
| The title compound (I, X = CH2) underwent substitution with halides to give I [X = CHMe, CHCHMe2, CHCH2Ph, CHC6H3(NO2)2-2,4, CHI, 4,6-dichloro-1,3,5- triazin-2-ylmethylene, CHAc, CHBz, CHSO2Me, CAc2, CBz2, C(SO2Me)2], some of which were isolated as the 2-alkylbenzimidazolium salts. |
| Dimeric acylation products were obtained with ClCO(CH2)nCOCl (n = 0,2). |
| Me L-Ph N-C-C-Ph Me |
| ● ні |
| Journal fuer Praktische Chemie (Leipzig) (1979), 321(2), 320-2 |
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| Gonadotropin releasing hormone is known as a hormone which controls secretion of sex hormones at the highest position, and controls secretion of anterior pituitary hormones luteinizing hormone and follicle-stimulating hormone and sex hormones in sex glands, via a receptor which is present in the anterior |
| pituitary. Since antagonists specific and selective for this GnRH receptor regulate the action of GnRH and control secretion of subordinate LH and FSH and sex hormones, they are expected as preventive or therapeutic agents for sex hormone dependent diseases. |
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| | The reactions of thioacetals and dithiolates were described. Thus, (RCO)2C:C(SMe)2 (R = Me, Ph) | |
| | reacted with PhCH2NH2 to give (RCO)2C:CR1R2 (R1 = SMe, R2 = NHCH2Ph; R1 = R2 = NHCH2Ph) | |
| | and (PhCO)2C:C(SMe)2 reacted with dinucleophiles, e.g., (H2NCH2)2 and o-(H2N)2C6H4, to give | |
| | cyclic heteroacetals, e.g. 1 (X = CH2CH2 o-C6H4). Alkylation of MeCO(PhCO)C:C(S-)2 with CICH2CN | |
| | gave thienothiophene II via an open-chain S,S-acetal and subsequent cyclization. PhCOCH2COCH2Ph | |
| | reacted with CS2 and NaH to cleave Na2S; alkylation of the product with Mel gave thiopyranone III. Treating (PhCOCH2)2 with PhNCS gave PhCOC(CH2COPh):C(NHPh)S- which was cyclized and | |
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